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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,017	10/16/2003	Yaming Jin	1856-24501 (9518.0-01)	9148

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EXAMINER

NGUYEN, CAM N

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 04/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/687,017

Applicant(s)

JIN ET AL.

Examiner

Cam N. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on February 02, 2006 (an amendment/response)
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-12, 14-19, 21-32, 34-40 and 42-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-12, 14-19, 21-32, 34-40 and 42-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicants' amendment and remarks, filed February 02, 2006, has been made of record and entered. Claims 1, 13, 20, 33, & 41 have been canceled. Claims 15, 35, 43, & 49-50 have been amended. Claims 51-53 have been added.

Claims 2-12, 14-19, 21-32, 34-40, & 42-53 are currently pending and under consideration.

Status of Withdrawn Claims

2. This application contains claims 17-19 are drawn to an invention nonelected with traverse in Paper No. Dated August 29, 2005. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 102(e)

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 2-12, 14-19, 21-32, 34-40, & 42-53 are rejected under 35 U.S.C. 102(e) as being anticipated by Singleton et al., "hereinafter Singleton", (US Pat. 6,537,945 B2).

Singleton discloses a Fischer-Tropsch catalyst, said catalyst comprising: an γ -alumina support; an amount of cobalt, supported on said γ -alumina support, and at least one promoter on said γ -alumina support with said cobalt, etc., and an amount of a dopant selected from the group consisting of a lanthanum, barium, and combination thereof, etc. (see col. 10, claim 1). Said promoter is ruthenium (see col. 11, claim 2). The γ -alumina support is produced from aluminum alkoxide which is hydrolyzed to produce an alumina product and wherein said dopant is incorporated into said γ -alumina support by adding a dopant alkoxide to, and co-hydrolyzing said dopant alkoxide with, said aluminum alkoxide ... to form said γ -alumina support (see col. 11- col. 12, claim 5 & see also claim 6).

There is no patentable distinction seen between the claimed catalyst and that disclosed by Singleton, thus the claims are anticipated by the reference.

Response to Applicants' Arguments

5. Applicants' amendment and remarks filed on February 02, 2006 has been fully considered, but not deemed persuasive because of the following reasons.

First, applicants urged that "Singleton only discloses the doping of alumina with lanthanum oxide and/or barium oxide to provide a more thermally stable alumina support. The following elements: lanthanum and barium in the structural stabilizer are not recited in Claim 15 nor in Claim 44. Thus, Singleton does not anticipate Claims 15

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and 44" (applicants' response page 14, fourth paragraph). This is not persuasive because the instant claims 15 and 44 are not being limited to only the claimed structural promoters, thus, the lanthanum and barium disclosed by the Singleton reference are not excluded. It should also be noted that the alumina support also contains "titanium" besides lanthanum and barium (see Singleton at col. 10, claim 1), which is one of the suitable structural promoters set forth in the instant claims 15 & 44. Whether the titanium is present in the alumina as an impurity of alumina during the process of preparing the alumina or added after the alumina was prepared does not distinguish from the claimed support material.

Second, applicants urged that "the cobalt and typical promoters which are impregnated on doped alumina in Singleton, Singleton clearly regards them as catalytic components of the catalyst and not as structural promoter(s) for the alumina support as set forth in the claimed invention" (applicants' response page 14, last paragraph). The instant claims recite Co, as one of the structural promoters, and a catalytic metal, which can be Co, Ni, Fe, Ru, or combinations thereof. Thus, it is considered that the claimed catalytic metal (Co) does not distinguish from the cobalt disclosed in the Singleton reference.

Third, applicants urged "Singleton teaches calcining the alumina impregnated with cobalt and one or more promoters at a temperature held at approximately 250-400°C, with a specific example carried out at 300°C, etc." (applicants' response page 15, last paragraph). This is not found persuasive because the instant claims require calcining the support precursor at a temperature of between about 450°C and about

900°C and Singleton teaches calcining the support material at from about 400°C to about 700°C (see Singleton at col. 6, ln 45-47), which falls within the claimed range.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

7. Claims 2-12, 14-16, 21-32, 34-40, & 42-53 are pending. Claims 2-12, 14-16, 21-32, 34-40, & 42-53 are rejected. Claims 17-19 remain withdrawn. No claims are allowed.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner Cam N Nguyen, whose telephone

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number is 571-272-1357. The examiner can normally be reached on M, W, R, & F, 9:00 AM - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nguyen/cnn *cnn*
April 07, 2006

Cam N. Nguyen
CAM N. NGUYEN
PRIMARY EXAMINER

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